STAFF REPORT

CITY OF MANTECA - WASTEWATER QUALITY CONTROL FACILITY
PROPOSED NPDES PERMIT RENEWAL
AND
TIME SCHEDULE ORDER
SAN JOAQUIN COUNTY

Two items are being considered for adoption: (1) issuance of a renewed National Pollutant Discharge Elimination System (NPDES) permit for the City of Manteca – Wastewater Quality Control Facility, and (2) a Time Schedule Order (TSO) with a time schedule requiring full compliance with the seasonal (April through August) electrical conductivity final effluent limitation by 1 October 2014.

BACKGROUND

The City of Manteca (hereinafter Discharger or City) owns and operates the City of Manteca Wastewater Quality Control Facility (hereinafter Facility). The Facility is a regional treatment facility as it provides sewerage services for commercial and residential uses within the City of Manteca and a portion of the City of Lathrop and for Raymus Village in San Joaquin County, serving a population of approximately 80,500. The City has begun preliminary discussions with the Oakwood Shores residential development and with the City of Ripon regarding providing sewerage service.

The discharge is currently regulated by Order No. R5-2004-0028, which was adopted on 19 March 2004 and expired on 1 March 2009. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and NPDES permit are adopted. Further, Cease and Desist Order No. R5-2004-0029 (CDO) was adopted by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), on 19 March 2004 and establishes a time schedule for the Discharger to comply with aluminum, ammonia, arsenic, copper, cyanide, iron, manganese, MBAS, nitrate, nitrite, and seasonal (April through August) electrical conductivity (EC) effluent limitations established in Order No. R5-2004-0028. The existing Orders were petitioned by the Discharger. The State Water Resources Control Board (State Water Board), in Order WQ 2005-0005, supported the majority of the decisions by the Central Valley Water Board, but determined that the seasonal EC limitation (700 µmhos/cm) was not reasonable since salinity problems in the southern Delta are the result of many factors including upstream diversions. However, at that time, the irrigation season Bay Delta Plan objective (700 µmhos/cm) for the San Joaquin River at Vernalis, which is upstream of the discharge, was not in effect. The Facility is permitted for an average dry weather flow of 9.87 million gallons per day (mgd).

FACILITY DESCRIPTION

Since adoption of Order No. R5-2004-0028, the Facility has undergone major expansions and upgrades. In August 2005, the Discharger obtained higher-quality surface water from South County Water Supply Program to blend with its existing groundwater drinking water supply to improve its drinking water supply source (e.g. lower salinity). In May 2006, biological nitrification-denitrification was added to the secondary treatment process to remove ammonia and nitrate. In September 2007, the City also added a secondary effluent equalization pond, a filter-feed pump station, coagulation and flocculation facilities, tertiary filters, a chemical storage and handling facility, an ultraviolet light pathogen deactivation system (UV Disinfection), an effluent pumping station, a recycled water pumping station, a groundwater well for plant process water, and a construction truck recycled water filling station. In 2007, the Facility was also modified to fully separate the food-processing waste received from Eckert Cold Storage to apply directly to agricultural fields.

The Facility is currently a 9.87 mgd rated combined biofilter-activated sludge tertiary treatment plant, and the maximum daily flow rate is about 8.1 mgd. Currently, at the Facility, an influent pump station with two mechanical screens serves two parallel treatment systems. Primary treatment, which is identical in both systems, consists of aerated grit removal, and primary sedimentation. Primary effluent undergoes biological treatment by ultra fine-bubble activated sludge aeration basins, nitrification and denitrification, and secondary sedimentation at both treatment systems. However, at the northside treatment system, the primary effluent first undergoes additional treatment through two biotowers with high-rate plastic media.

Undisinfected secondary effluent is either stored for agricultural irrigation use in a 15 million gallon pond or blended with food processing waste and reused directly to agricultural fields. The agricultural fields are used to grow crops for dairy feed. The land application area consists of 190 acres owned by the Discharger, plus another 70 acres owned by Dutra Farms, Inc.

Secondary effluent in excess of crop demands undergoes further treatment through rapid mixing, flocculation, tertiary level using cloth media filtration, and UV Disinfection. Disinfected tertiary level treated effluent is discharged to the San Joaquin River through a 36-inch outfall. The disinfected tertiary effluent is also pumped from the Facility to its Truck Fill Station, located at the entrance of the Facility. The Truck Fill Station provides access for construction vehicles to receive recycled water for construction dust-control purposes. The Discharger also has plans for additional uses of recycled water (City of Manteca Recycled Water Master Plan, 2007).

COMMENTS

Written public comments on the proposed Orders were required to be received by the Central Valley Water Board by 10 September 2009 in order to receive full consideration. Comments were received by the due date from the following parties:

1. City of Manteca (City or Discharger),
2. California Sportfishing Protection Alliance (CSPA), and
3. San Luis & Delta-Mendota Water Authority (Authority) and Westlands Water District (Westlands)

The significant permitting issues are discussed below and a complete response to comments is provided in the agenda package.

SIGNIFICANT PERMITTING ISSUES

The significant permitting issues for the proposed NPDES permit are the salinity effluent limitations, facility expansion up to 17.5 mgd, and Title 27 California Code of Regulations, section 20005 et. seq.

1. **Salinity (EC) Issues.** The discharge contains total dissolved solids (TDS), chloride, sulfate, and electrical conductivity (EC). These are water quality parameters that are indicative of the salinity of the water. Their presence in water can be growth limiting to certain agricultural crops and can affect the taste of water for human consumption. The Basin Plan contains a chemical constituent objective that incorporates State MCLs, contains a narrative objective, and contains numeric water quality objective for EC.

   The secondary MCL for EC is 900 µmhos/cm as a recommended level, 1600 µmhos/cm as an upper level, and 2200 µmhos/cm as a short-term maximum. The Bay-Delta Plan's 30-day average salinity objectives for the southern Sacramento-San Joaquin Delta are to protect agricultural irrigation uses, and vary seasonally from 700 µmhos/cm (1 April to 31 August) to 1000 µmhos/cm (1 September to 31 March).

   A review of the Discharger's self-monitoring reports (after operation of tertiary filtration/UV disinfection) show a maximum monthly average EC concentration of 783 µmhos/cm (MEC) during the months April through August (irrigation season) and a MEC of 827 µmhos/cm during the months September through March (non-irrigation season). The maximum 30-day average background receiving water EC was 949 µmhos/cm (non-irrigation season) and 763 µmhos/cm (irrigation season). These levels do not exceed the secondary MCL or the non-irrigation season objective in the Bay-Delta Plan; however, these levels exceed the irrigation season

(April through August) Bay-Delta Plan salinity objective. Therefore, based on the data cited, the discharge demonstrates reasonable potential to exceed the objective.

The State Water Board, in Order WQ 2005-0005 (Manteca Order), determined that the seasonal EC limitation of 700 µmhos/cm (irrigation season) in the current Order No. R5-2004-0028 was not reasonable since salinity problems in the southern Delta are the result of many factors including upstream diversions and the water quality objectives were to be up for reconsideration by the State Water Board in the near future. However, since the current Order No. R5-2004-0028 was adopted the State Water Board updated the Bay-Delta Plan in 2006. The update re-affirmed the seasonal standards and updated the implementation program to include regulation of treated effluent discharges to the South Delta. Furthermore, in May 2009, the State Water Board held in Order WQ 2009-0003 for the City of Tracy (Tracy Order) that the Clean Water Act requires compliance with existing water quality objectives pending the development of long-term or interim regulatory solutions such as revisions to existing water quality standards, a TMDL, variances, site specific objectives, or an offset policy. (p. 10 and p. 17.)

Therefore, considering the recent decisions by the State Water Board, the proposed Order contains EC water quality-based effluent limitations for both the irrigation and non-irrigation seasons based on the Bay-Delta Plan. The Discharger is unable to immediately comply with the irrigation season effluent limitations, therefore, a Time Schedule Order has been proposed to allow a compliance schedule.

2. **Facility Expansion.** The proposed Order allows an increase discharge flow of 7.63 mgd (an increase in discharge from 9.87 mgd to 17.5 mgd) conditional upon compliance with permit limitations and completion of the Facility expansion project. The Discharger released the *Draft Environmental Impact Report City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project July 2007* (prepared by EDWA) (The DEIR) for public review, and the Final Environmental Impact Report in January 2008. The Discharger also developed and submitted to the Central Valley Water Board a report titled, *City of Manteca Antidegradation Analysis for Proposed Wastewater Quality Control Facility Discharge Modification,* August 2008 (prepared by Larry Walker & Associates) (The Antidegradation Analysis) that provides a complete antidegradation analysis following the guidance provided by State Water Board APU 90-004. Pursuant to the guidelines, The Antidegradation Analysis evaluated whether changes in water quality resulting from the proposed capacity increase (17.5 mgd year-round tertiary treated discharge) are consistent with the maximum benefit to the people of the state, will not unreasonably affect beneficial uses, will not cause water quality to be less than water quality objectives, and that the discharge provides protection for existing in-stream uses and water quality necessary to protect those uses.

i. Water quality impacts of an increase in permitted capacity. The proposed Order does not adversely impact beneficial uses of the receiving water or downstream receiving waters. All beneficial uses will be maintained and protected. The proposed Order provides for an increase in the volume and mass of pollutants discharged directly to the receiving water. Code of Federal Regulations 40 CFR 131.12 defines the following tier designations to describe water quality in the receiving water body.

Tier 1 Designation: *Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. (40 CFR 131.12)*

Tier 2 Designation*: Where the quality of waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control. (40 CFR 131.12)*

The tier designation is assigned on a pollutant-by-pollutant basis. The following is the potential effect on water quality parameters regulated in the proposed Order, and was assessed in the Antidegradation Analysis.

- The near-field and far-field water quality of the San Joaquin River within the Sacramento-San Joaquin Delta with respect to chemical constituents, and DO, would be minimally affected by the proposed increase in discharge, and that the water quality necessary to protect beneficial uses would be maintained.

- However, this is not the case for temperature. Effluent cooling facilities planned as part of the Phase IV expansion, will be designed to mitigate potential exceedances of The Thermal Plan objectives. The Discharger submitted a study assessing the thermal impact of its discharge in the San Joaquin River, titled *City of Manteca Wastewater Quality Control Facility Thermal Plan Exception Analysis Final Report, February 2006,* and is requesting an exception to The Thermal Plan. Fisheries experts from the National Marine Fisheries Service are to determine the validity of the assumptions used to develop the temperature model and the conclusion regarding impacts to fisheries sources in the study before the Central Valley

Water Board will consider the Discharger's request. Therefore, the proposed Order requires compliance with the Thermal Plan.

- The increased discharge would negligibly increase loading of bioaccumulative constituents. No beneficial uses of San Joaquin River are anticipated to be adversely affected by the planned action.

ii. Scientific Rationale for Determining Potential Lowering of Water Quality. The rationale used in the Antidegradation Analysis is based on Code of Federal Regulation, Section 131.12 (40 CFR 131.12), State Water Board Resolution No. 68-16, an Administrative Procedures Update (APU 90-004) issued by the State Water Board to the Regional Water Quality Control Boards, the Basin Plan, the CTR, and the 303(d) Listings.

The scientific rationale used in the Antidegradation Analysis evaluates the near-field and far-field water quality impacts of increasing the discharge. The near-field effects on San Joaquin River water quality will occur between the point of discharge and approximately 1-mile downstream of the discharge where advanced treated effluent and ambient river water are well-mixed. Near-field water quality impacts are estimated using 1) projected tertiary-treated effluent quality, 2) ambient river concentrations calculated from dry/below normal water years, 3) current permitted and proposed effluent flowrates, and 4) average late summer/early fall San Joaquin River flows observed during historical critical and dry water years. The far-field effects on the San Joaquin River were assessed on specific Sacramento-San Joaquin Delta locations where surface water is diverted for eventual use as drinking water and also in the Stockton Deep Water Ship Channel. Far-field water quality impacts are estimated using 1) historic effluent quality, 2) projected effluent quality, 3) current permitted and proposed effluent flowrates, and 4) modeled percent contribution effluent at selected Sacramento-San Joaquin Delta locations under representative critical and dry/below normal water years. This approach is consistent with recent USEPA guidance and addresses a key objective of the Antidegradation Analysis, which is to "[c]ompare receiving water quality to the water quality objectives established to protect designated beneficial uses" (APU 90-004).

The Antidegradation Analysis analyzed pollutants that were based on one or more of the following conditions: 1) the Facility received an effluent limitation for a particular constituent, 2) the constituent was identified as a pollutant/stressor on the 303(d) list for selected Delta waterways, 3) an adopted TMDL exists downstream of the discharge, or 4) the constituent is a historic pollutant of concern in the Delta. The Antidegradation Analysis evaluated each selected pollutant detected in the effluent and receiving water to determine if the proposed discharge increase of 7.63 mgd authorized by the proposed Order potentially allows significant increase of the amount of pollutants present in the upstream and downstream receiving water influenced by the proposed discharge.

Pollutants that significantly increased concentration or mass downstream would have required an alternatives analysis to determine whether implementation of alternatives to the proposed action would be in the best socioeconomic interest of the people of the region, and be to the maximum benefit of the people of the State. Details on the scientific rationale are discussed in detail in the Antidegradation Analysis. This includes a detailed discussion on calculating near-field, and long-term water quality effects associated with a continuous discharge to a tidal estuary where the effluent and tidal flows provide the critical mixing and dilution.

The Central Valley Water Board staff concur with this scientific approach.

iii. **Alternative Control Measures.** APU 90-004 requires the consideration of "feasible alternative control measures" as part of the procedures for a complete antidegradation analysis. The Discharger considered several alternatives that would reduce or eliminate the lowering of water quality resulting from the proposed 7.63 mgd discharge increase. The Antidegradation Analysis assessed maintaining existing water quality in the San Joaquin River and the Delta with an increase in discharge through evaluating 1) effluent-to-land disposal, 2) additional wastewater treatment by microfiltration and reverse osmosis (MF/RO), or 3) no increase in discharge capacity. These plant expansion alternatives are summarized below:

- The land application of secondary treated effluent would offset projected reductions in San Joaquin River water quality as a result of the proposed project; however, operational costs are estimated at $28.5 million to construct and an additional $300,000 per year to operate. The Antidegradation Analysis further states that an economic impacts model estimates that these costs would have adverse socioeconomic effects (e.g. job losses). In addition, land application may elevate salinity and boron levels found in the Central Valley groundwater.

- The implementation of MF/RO would also offset estimated reductions in San Joaquin River water quality; however, the treatment facility would cost an estimated $93.5 million to construct and an additional $4.9 million per year to operate. The economic impacts model also estimates job losses due to this project, and the Antidegradation Analysis presents issues regarding the brine and crystallized residuals disposal.

- No Project Alternative, which is not to increase the discharge capacity.

  None of the alternatives evaluated would substantially reduce or eliminate significant water quality impacts of the proposed action, because the proposed action would not significantly degrade water quality. Some of the alternatives may result in water quality effects elsewhere, or other

environmental impacts, that are worse than those identified for the proposed action

iv. Socioeconomic Evaluation. The objective of the socioeconomic analysis was to determine if the lowering of San Joaquin River water quality within the Sacramento-San Joaquin Delta is in the maximum interest of the people of the state. The socioeconomic evaluation within the Antidegradation Analysis provides an in-depth analysis of: 1) cost and benefits and 2) socio-economic impacts of alternatives for maintaining existing water quality, and 3) balance of environmental benefits and socio-economic considerations. The Antidegradation Analysis also provided results from modeling of the economic impacts on the community.

Given the current infrastructure, future development in the cities of Manteca and Lathrop and surrounding communities, would rely on the Discharger and its Facility for wastewater collection, treatment, and recycled water services. The plant expansion of 7.63 mgd and increase surface water discharge would accommodate planned and approved growth in these cities. Should the incremental changes in San Joaquin River water quality characterized herein be disallowed, such action would: (1) force future developments in the Discharger's service area to find alternative methods for disposing of wastewater; (2) require adding a reverse-osmosis treatment processes to a significant portion of flow, and possibly other plant upgrades, to eliminate the small water quality changes; or (3) prohibit planned and approved development within and adjacent to the Discharger's service area. On balance, allowing the minor degradation of water quality is in the best interest of the people of the area and the state, compared to these other options; and is necessary to accommodate important economic or social development in the area.

v. Justification for Allowing Degradation. Potential degradation identified in the Antidegradation Analysis and due to the proposed Order is justified by the following considerations:

- The increase in permitted discharge capacity is necessary to accommodate important economic and social development in the City of Manteca and surrounding communities, and is consistent with the Discharger's General Plan. Failure to approve the increase, or alternatively requiring the Discharger to implement control measures that would maintain existing water quality and mass emissions in the San Joaquin River, would have significant adverse economic and social impacts on the City of Manteca and surrounding communities and their citizens and businesses.

- The Facility will discharge Title 22 tertiary treated effluent that will result in minimal water quality degradation, and meet or exceed the highest statutory

and regulatory requirements which meets or exceeds best practical treatment or control (BPTC).

- The Order is fully protective of the beneficial uses of the San Joaquin River within the Sacramento-San Joaquin Delta. The anticipated water quality changes in the San Joaquin River will not reduce or impair its designated beneficial uses and is consistent with State and federal antidegradation policies.

- The increased discharge, while causing slight increases in downstream water quality concentrations for some constituents, will produce slight decreases in downstream concentrations for others,

- The benefits of maintaining existing water quality and mass emissions for the constituents analyzed are not commensurate with the costs of additional treatment. Therefore, no feasible alternatives currently exist to reduce the impacts, and

- The Discharger has fully satisfied the requirements of the intergovernmental coordination and public participation provisions of the State's continuing planning process concurrent with the public participation period of the proposed Order.

3. **Title 27, California Code of Regulations (CCR), section 20005 *et seq*. (hereafter Title 27)** Discharges of wastewater to land, including but not limited to evaporation ponds or percolation ponds, are exempt from the requirements of Title 27, CCR, based on section 20090 *et seq.* The Facility contains storage facilities and agricultural reuse fields where a determination must be made by the Central Valley Water Board whether the facilities meet the exemptions from Title 27. These facilities include the Secondary Effluent Equalization Pond (SEEP), Secondary Effluent Storage Pond (SESP), Food Receiving and Processing Wastewater Pond, and the Land Application Areas.

   a. **Secondary Effluent Equalization Pond (SEEP).** The SEEP is exempt from the requirements of Title 27, pursuant to Title 27 CCR section 20090(a). Provision H.4 of Order No. R5-2004-0028 required the Discharger to construct additional storage facilities to demonstrate adequate storage capacity of treated domestic sewage so the discharge to the San Joaquin River could be ceased during periods of incoming tides. The SEEP was constructed to comply with Provision H.4, and therefore, is a necessary part of the Facility's wastewater treatment system. Secondary effluent may be stored in the SEEP prior to tertiary-level treatment and discharge to the San Joaquin River. The SEEP is fully tetra-lined.

b. Food Receiving and Processing Wastewater Pond. The Facility accepts food-processing wastewater from Eckert Cold Storage through a separate influent collection line. The wastewater does not go to the headworks of the WQCF. Eckert Cold Storage is a seasonal discharger that processes frozen vegetables, cabbage, and a variety of peppers. Eckert Cold Storage treats the food-processing wastewater by screening, DAF system, and pH neutralization before discharging to the Facility. The Facility stores and aerates the treated food processing wastewater in the Food Receiving and Processing Wastewater Pond, which is a tetra-lined pond (sides walls and bottom are lined). The Discharger also provides chemical addition in the pond for odor control and additional treatment.

The wastewater does not need to be managed as hazardous waste, and because the pond is lined, the relatively minimal discharge to groundwater would have little effect to cause to exceed applicable water quality objectives. Thus, the discharge to the pond is in compliance with the applicable water quality control plan. Based on these findings the Food Receiving and Processing Wastewater Pond is exempt from the requirements of Title 27 CCR, pursuant to Title 27 CCR section 20090(b).

c. Secondary Effluent Storage Pond (SESP). The SESP holds only secondary effluent that has been treated at the Facility. The SESP has rip/rap sidings and an unlined bottom; therefore, wastewater contained in the SESP potentially percolates to the underlying groundwater. Monitoring data obtained from the secondary effluent discharged to land, which is representative of the discharges to SESP, indicate that some constituents do not comply with the applicable water quality control plan. For example, the Basin Plan contains narrative objectives for chemical constituents, tastes and odors, and toxicity of groundwater. The chemical constituent objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use. Electrical conductivity (EC) and total dissolved solids (TDS), which were found in the representative samples at monthly average effluent concentrations of 817 µmhos/cm and 575 mg/L, respectively, have the ability to degrade the underlying groundwater quality and thereby impairing agricultural use of the groundwater. However, groundwater monitoring data has not been obtained to determine whether any attenuation beneath SESP has occurred. But based on the monitoring results of the representative samples, the wastewater in the SESP does not need to be managed as Hazardous Waste. Until the Discharger provides further information (e.g. underlying groundwater monitoring data or a site-specific study to determine the appropriate EC or TDS levels to protect the agricultural beneficial use in the vicinity of the Facility), the Central Valley Water Board cannot determine whether the wastewater stored in SESP, and thus the underlying groundwater, comply with the applicable water quality control plan. Because compliance cannot be determined immediately, the proposed Order

includes a compliance schedule to determine compliance with the applicable water quality control plan.

d. Land Application/Reuse of treated Municipal and Industrial Wastewater. During the agricultural season (about late April through early October), the Discharger either directly irrigates agricultural fields with the treated food processing wastewater, or blends this treated food processing wastewater with secondary treated municipal effluent before reusing the wastewater on land. Machado Dairy Farm and Dutra Farms use these reclaimed wastewaters for irrigation purposes on the agricultural fields to grow dairy feed. Both farmers have rights to other source water; however, this source water is obtained from a local reservoir that is of higher-quality and used as municipal drinking water source for several local municipalities, including the City of Manteca. Therefore, use of reclaimed wastewater for irrigation purposes on agricultural fields to grow dairy feed, in this case, serves to conserve valuable surface water drinking water supplies. Moreover, both farmers must grow the feed for the dairy cows, and thus purchasing the feed instead would cause a financial hardship. In addition, because both farmers are family owned businesses, purchasing feed would most-likely cause a family member to lose their position and thereby placing additional financial hardships. Furthermore, purchasing the feed would also raise operating costs, which could potentially raise the cost of the milk produced and thereby make the farms less competitive. The reuse of treated wastewater on the agricultural fields is exempt from Title 27 pursuant to Section 20090(h) (reuse exemption).

4. **New Water Quality-Based Effluent Limits (WQBELs) for Silver.** Silver is a priority pollutant with hardness-dependent CTR criteria. In development of the tentative NPDES permit, the reasonable potential analysis (RPA) was conducted using a reasonable worst-case downstream ambient hardness to calculate the CTR criteria. This resulted in an acute criterion of 2.2 ug/L. The maximum effluent concentration (MEC) is 0.86 ug/L and the maximum upstream ambient silver concentration is <0.12 ug/L. These values do not exceed the criterion, so a determination was made that there was no reasonable potential and WQBELs for silver were not necessary. However, when conducting the RPA the permit writer should have used the minimum observed upstream ambient hardness to calculate the silver CTR criteria. The minimum upstream ambient hardness is 36 mg/L (as $CaCO_3$), which results in an acute CTR criterion for silver of 0.7 ug/L. The MEC exceeds this criterion, therefore the discharge has reasonable potential and WQBELs are required. The tentative NPDES permit has been modified to include WQBELs for silver as shown in the table below.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Silver, Total Recoverable	µg/L	1.1		2.0		

Analysis of the effluent data shows that the MEC of 0.86 µg/L is less than the applicable WQBELs. Central Valley Water Board staff concludes, therefore, that immediate compliance with these effluent limitations is feasible.

MAJOR PERMIT CHANGES OR ADDITIONS

The following is a summary of the major changes and additions to the NPDES Permit since the previous Order.

- increase in permitted average dry weather discharge flow (from 9.87 mgd to 17.5 mgd)
- New or more stringent effluent limitation for salinity as electrical conductivity and ammonia.
- New, less stringent, aluminum effluent limitation calculated based on site-specific water effects ratio study.
- New numeric groundwater limitations
- Requirement to comply with Title 27 for discharges to agricultural fields.